
ECON 3402 - Statistics for Business I

SUMMER 2020

Instructor: Trung Ly, Ph.D.

Time and Location:

- Section E01: Online.

Contact info: email: trungly@westga.edu

Office & Office Hours: Miller Hall (RCOB) 1313. Unless otherwise noted, I am available Monday through Thursday: 2:00 PM - 4:00 PM and by appointment. All office hours are held virtually. In order to attend office hours, I ask that you sign up at <https://calendly.com/trunglyuwg>. Once you make an appointment, you will receive a confirmation email with the date and time and a link to join the online meeting with me via Google Meet. If you use a computer, you just have to click on the link in the email. If you use a mobile device (phone or tablet), you may have to install Google Meet, which is a free app.

Contacting me (outside of office hours): Email is the primary mode of communication between you and me throughout this course. You are required to check your university-assigned email account (the Gmail one, not the one on CourseDen) for all announcements and updates. You are encouraged to ask questions via email but should expect that it may take up to 24 hours to receive a response (I normally respond much faster than that). If you do not receive a response after 24 hours, please follow up with another email. Due to the large number of emails I get on a daily basis, please start the subject line with “ECON 3402-XX”, where XX is the section number.

All email correspondence should be professional, and should make use of a salutation, a sign-off, proper grammar, and as little slang as possible. This policy is not to encourage formality for its own sake, but rather to build habits to prepare you for your professional life after graduation.

Supplemental instruction: The Supplemental Instructor for this course is Lindsay Dooley (lidooley1@my.westga.edu).

Overview and Objectives

The emphasis of the course is on applications of statistics in business. Topics include methods of presenting data, numerical measures and correlation, probability theory and probability distributions, sampling distributions, interval estimation, and hypothesis testing.

By the end of the semester, you should be able to:

1. construct and interpret tabular and graphical methods of presenting qualitative and quantitative data (LG2, LG3, LG10)

2. construct and interpret summary and numerical measures of location, variability, and association for the sample and the population (LG2, LG3, LG10)
3. apply basic probability concepts, expected value and variance to a variety of different business applications (LG2, LG6, LG10)
4. use discrete and continuous probability distributions and sampling distributions in a variety of business applications (LG2, LG3, LG6, LG10)
5. construct and interpret interval estimates and hypothesis tests (LG2)

This course presumes knowledge of elementary algebra.

Prerequisites

(MATH 1111 or MATH 1113), CISM 2201, and Richard College Upper Division RCUD.

Delivery methods

This class is fully online. Therefore, you need to have access to a computer and you must have access to the Internet.

Course Materials

1. In lieu of lectures, there are YouTube videos in which I walk you through the material as if you attend lectures in person. The videos are uploaded to my YouTube channel (Link: https://www.youtube.com/channel/UCaA_DbKxpbzHqt6k9UKLDUw; this link is also be posted in an announcement on CourseDen).

Videos are organized into different playlists. The videos in each playlist are arranged in the order that you should watch them, so just watch the playlists in the preset order, i.e. do not shuffle. The playlists are numbered, and you should watch them in the order from the smallest-numbered playlist to the largest-numbered one.

2. The textbook used in this course is *Statistical Techniques in Business and Economics* by Wathen, Lind, and Marchal, **17th Edition**. We use the Connect software that accompanies the textbook for problem sets and exams (more on Connect assignments below). You can purchase an access code through McGraw-Hill or from the bookstore, though purchasing it from the bookstore is more expensive. The access code gives you access to Connect as well as an eBook within the software.

Important note on the Connect software: the 18th edition of the book recently came out (or will be released in the very near future), which means that even though the access code you purchase for this course is supposed to be valid for 180 days, it will not work if you use it for a course that uses the 18th edition of the book after you finish this course with me (it is not compatible across editions of the book). I have worked

with the McGraw-Hill's campus rep on this, and the company has agreed to provide a new code to you at no cost for your next course that you will take either this summer or fall. Please let me know at the end of the semester if you need a new code, and we will work out the details.

Grading and Important Dates

Final grades for the course are based on the following:

Problem Sets	35%
Quizzes	20%
Midterm	20%
Final Exam	25%

Grade distribution: (I reserve the right to change this grade distribution if necessary)

90%+	A
80%-89.99%	B
70%-79.99%	C
60%-69.99%	D
Below 60%	F

Problem Sets:

There is generally a problem set for each main topic (each YouTube playlist) covered in class. These problem sets are administered on Connect. You have **three** attempts at each problem set, and the best score is used to calculate your grade. After the deadline of a problem set passes, you will be able to go back and redo the problem set as many times as you want if you would like more practice. The purpose of these problem sets is twofold: firstly, they allow you to apply what you learn in lectures to specific problems; and secondly, they help you become familiar with Connect.

Quizzes:

Several quizzes are be given throughout the semester. These quizzes are available under the Assessments drop-down menu on CourseDen. Questions on these quizzes are directly related to the content of the videos I post on YouTube. If you watch the videos and take notes, you should ace all these quizzes. The content of each quiz is obvious from the title of the quiz. Generally, you have two attempts at each quiz, and the best attempt is used to calculate your grade.

Examinations:

There is one midterm exam and a final exam, both of which are administered on Connect. There are two things you have to do for each exam:

1. Answer the questions and submit your exam on Connect.

2. As you work on the exam questions, you should be writing down how you arrive at the answers on separate sheets of paper. Within five (05) minutes of when you submit your exam on Connect, you have to take pictures of your solutions and submit them on CourseDen by going to the Assignment section under the Assessments drop-down menu. If possible, please submit them as one Word or PDF file, but this is not necessary.

Your written solutions should show all your work. If you don't show all the work leading up to the final answers you submit on Connect, you will not get full credits even if your final answers (on Connect) are correct. It is your responsibility to ensure that your written solutions are legible and that the quality of the photos is acceptable. What you submit to me should be something you feel comfortable submitting if this were a traditional face-to-face course. In other words, think of this as submitting an exam in a traditional face-to-face course. **If there is anything that you feel prevents you from fulfilling this portion of exams, please let me know within the first week of the course.**

Expectations

Videos:

While I do not track your "video watching" progress, it is nearly impossible to do well in this course without watching the videos. I am more than happy to help you with course material as long as you watch the videos and put forth the proper effort.

Information related to COVID-19:

I understand the unprecedented challenges that the current COVID-19 situation presents. I am here to support you, and the University has plenty of robust resources to assist students if issues arise during the course. Please do not hesitate to reach out to me if you need help.

Academic honesty:

You are expected not to engage in academic dishonesty. One of the goals of this course is to prepare you to do well in advanced economics courses, so it is essential that you develop a solid understanding of the material. **To that end, while collaboration on problem sets, quizzes, or exams is encouraged in this course, copying is not.** Students are expected to understand and abide by the University's honor code. (<https://www.westga.edu/UWGSyllabusPolicies/>). **Academic dishonesty, such as communicating during a test, using external materials for assistance on a test, or copying someone else's assignment, will result in grade of zero.**

Due dates

Since this is an online course, you can work at your own pace but you must complete all assignments by the designated deadlines. The deadlines are as follows:

Thursday, June 4, 2020: Problem set 1 on Numerical descriptive statistics and information sheet are due at 11:59PM.

Tuesday, June 9, 2020: Problem set 2 on Probability is due at 11:59PM.

Sunday, June 14, 2020: Problem set 3 on Discrete probability distributions **AND** Problem set 4 on Continuous probability distributions are due at 11:59PM.

Tuesday, June 16, 2020: the midterm exam is due at 11:59PM.

Thursday, June 18, 2020: Problem set 5 on Sampling distributions is due at 11:59PM.

Sunday, June 21, 2020: Problem set 6 on Confidence intervals is due at 11:59PM.

Thursday, June 25, 2020: Problem set 7 on Hypothesis testing is due at 11:59PM.

Sunday, June 28, 2020: the final exam is due at 11:59PM.